

Client: \_\_\_\_\_

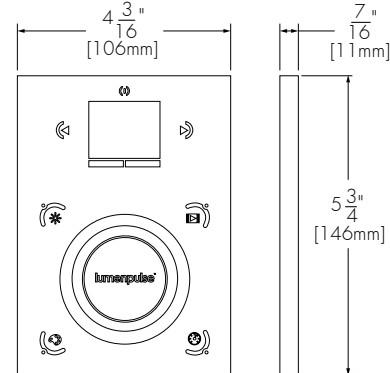
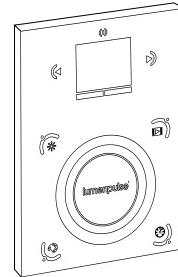
Project name: \_\_\_\_\_

Order #: \_\_\_\_\_

Type: \_\_\_\_\_ Qty: \_\_\_\_\_

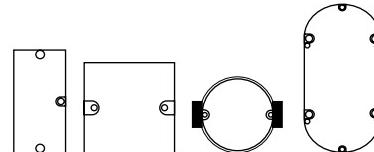
## FEATURES AND BENEFITS

- Flat wall mounted lighting controller
- Can be used without a computer in stand alone mode
- Universal mounting plate compatible with most electrical backboxes
- MINI-USB connection for software programming
- Touch sensitive control panel
- 2 DMX universes (1024 channels)
- Unlimited memory via Micro SDCARD
- Integrated clock/calendar
- RS 232 serial and I/O ports
- Universal infrared receiver
- Standard with ETHERNET card



## PACKAGE CONTENT

- Lumenpulse hardware (stand alone wall mounted DMX controller)
- Mini-USB cable
- Micro SDCARD and adapter
- 9V DC power supply (120-240V AC input voltage)  
with connector block for DMX connection
- Compatible with Windows (XP, VISTA and 7, 32-bit or 64-bit)
- PDF User manual available for download on the Lumenpulse website
- Lumenstudio programming software available for download on the Lumenpulse website



Universal back mounting plate

Hole pattern to fit most standard junction boxes

\*Extended back boxes are recommended for all installations.

## HOW TO ORDER

### LTO2

#### Housing

1

\* Please remove protective film before use to ensure proper operation of the controller.

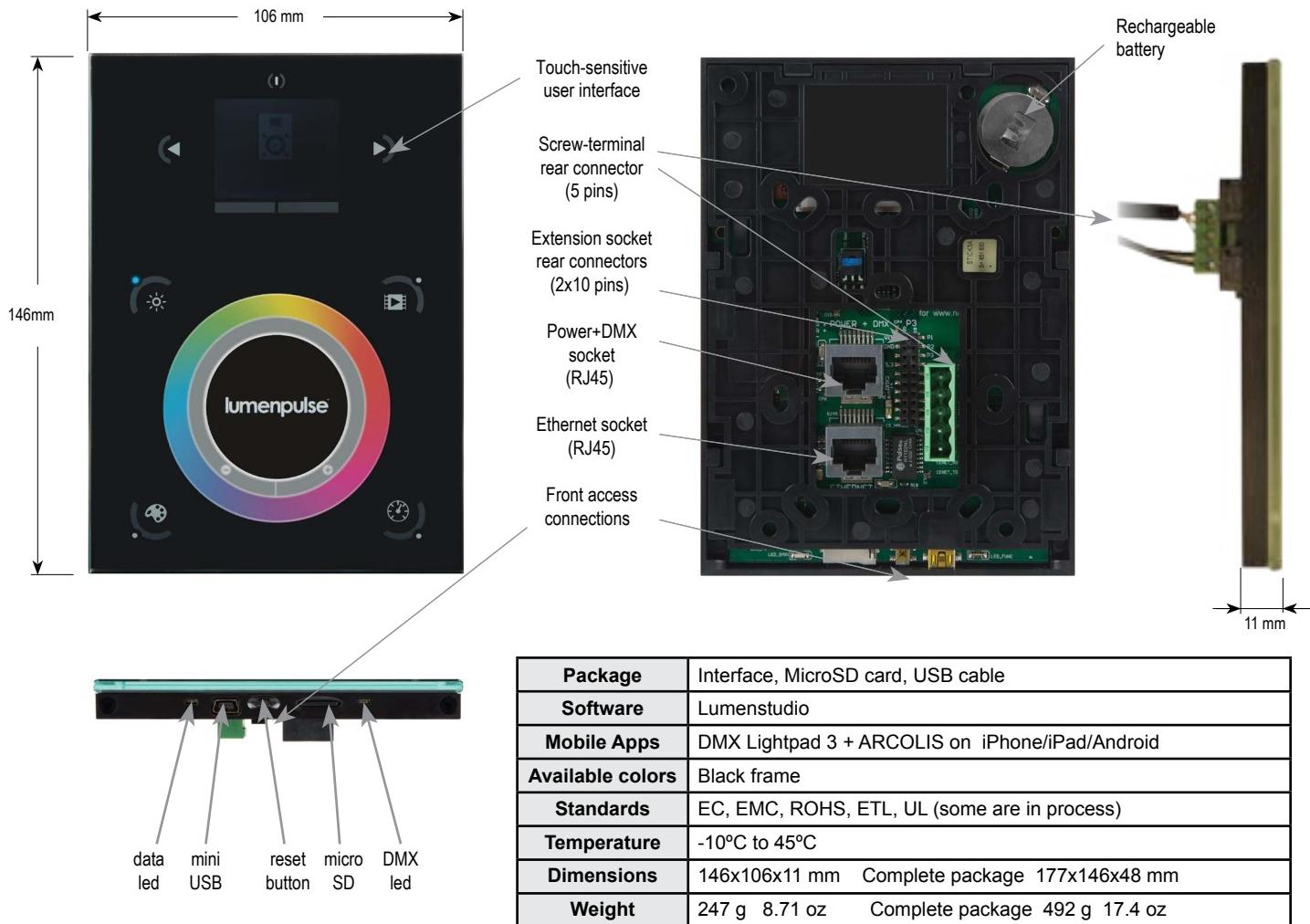
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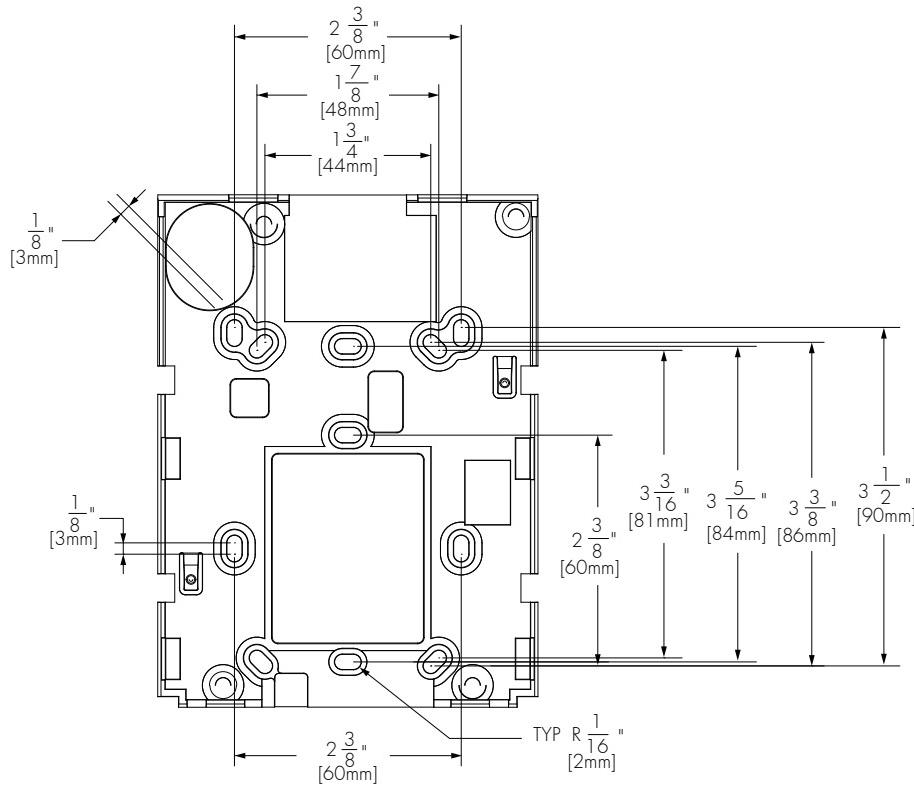
Lumenpulse reserves the right to make changes to this product at any time without prior notice  
and such modification shall be effective immediately.

## CONNECTIONS



<b>CONNECTION SPECIFICATIONS</b>		Built-in features	Screw-terminal rear connector (5 pins)	Extension socket rear connectors (2x10 pins)	Power+DMX socket (RJ45)	Ethernet socket (RJ45)	Front access connections
<b>Power Supply</b>	6V DC 0.6A, optional. 5.5v max with USB			•		•	USB
<b>DMX Output #1</b>	First universe, 512 channels DMX512 output			•		•	
<b>DMX Output #2</b>	Second universe, 512 channels DMX512 output				•	•	
<b>USB</b>	USB communication for PC software						•
<b>Ethernet</b>	Advanced networking features					•	
<b>Ports 1,2,...,8</b>	8 Contact closure inputs, connect to ground for operating				•		
<b>User interface</b>	10 buttons, 1 wheel, 1 color display, 5 leds (Touch-sensitive keypad)	•					power/data leds
<b>SD card</b>	Micro sd card for stand alone memory use (supplied)						•
<b>Reset</b>	Push button for feet operation						•
<b>RS232</b>	RS232 serial communication for external synchronisation				•		
<b>Output relay</b>	Automatic standby 5V signal				•		
<b>Clock</b>	Real-time clock and calendar	•					

## MOUNTING PATTERN



## MOUNTING HOLE PATTERN

\*Extended electrical back boxes are recommended for all installations

## INSTALLATION

### EASY INSTALLATION

#### 1. Mount an electrical box inside the wall

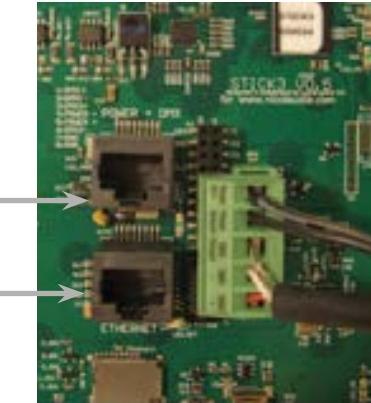
The Lumentouch controller can be installed to most standard electrical backboxes. If you use a double size box, you can insert the power supply inside.



#### 2. Connect the wires

**POWER:** Connect a 5.5V or 6V DC 0.6A power supply. Be sure to not invert the + and the ground.

**DMX:** Connect the DMX cable to the lighting receivers (Leds, Dimmers, Fixtures...) (for XLR: 1=ground 2=dmx- 3=dmx+)

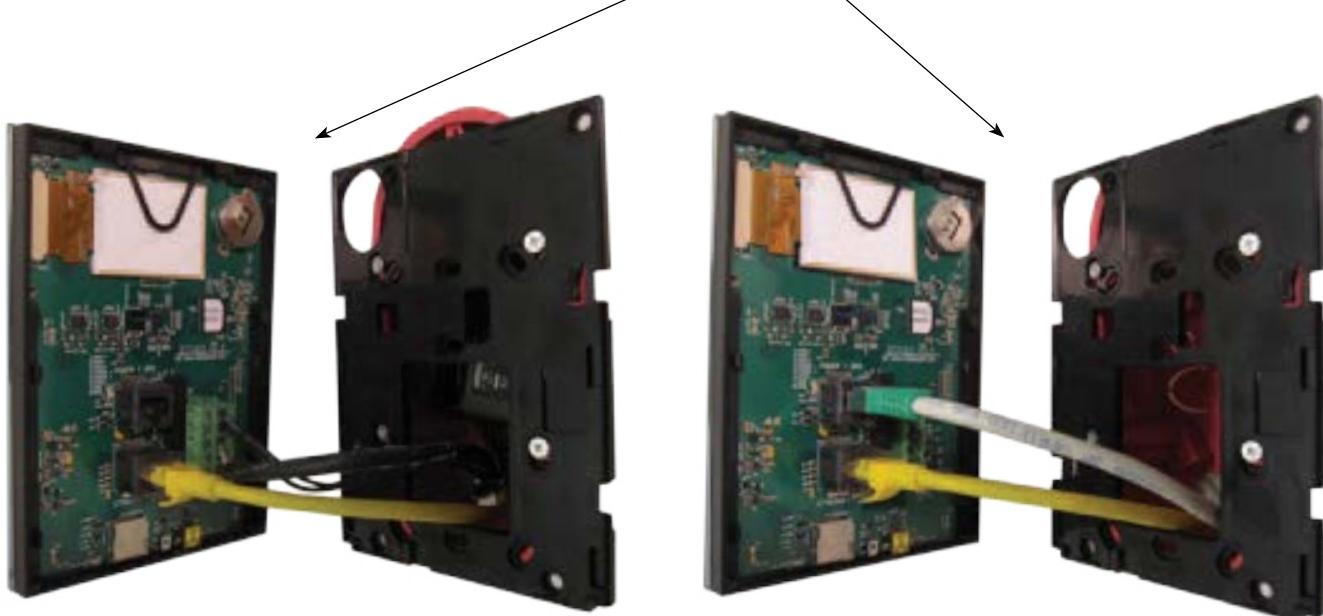


#### 3. Mount the interface on the wall

First, mount the back side of the interface on the wall with 2 or more screws

Secondly, plug the connectors :

- Ethernet cable
- DMX and power (connector block or RJ45)



#### POWER+DMX

WITH THE

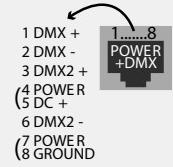
CONNECTOR BLOCK



#### POWER+DMX

WITH THE

RJ45 CABLE



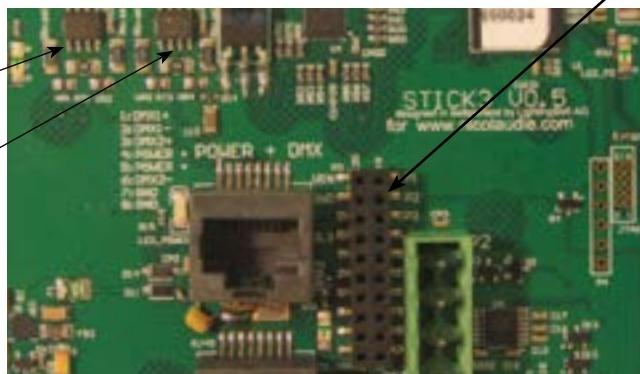
## EXTENSION CONNECTORS

**DMX CHIPS** can be replaced here

DMX universe #1

DMX universe #2

Ref: SP485ECN-L  
MAX485 CSA



2x10 pins EXTENSION connector

VIN	20	19	POR1
GND	18	17	POR2
IR_RX	16	15	POR3
3.3V	14	13	POR4
Relay	12	11	POR5
DMX2+	10	9	POR6
DMX2-	8	7	POR7
DMX1+	6	5	POR8
DMX1-	4	3	RS232 RX
GND_DMX	2	1	RS232 TX

Compatible connectors:

WURTH ELEKTRONIK ref: 61301021121

MOLEX ref: 10-89-7202

TE Connectivity ref: 1-87227-0

FCI ref: 77313-101-20LF

HARWIN ref: M20-9981046

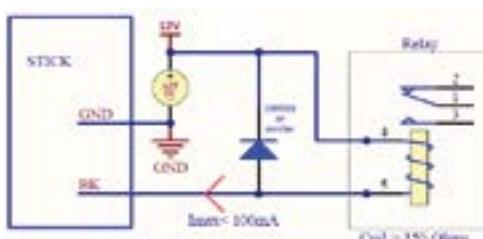
SAMTEC ref: TSW-110-xx-T-D

FARNELL ref: 1841232

RS ref: 763-6754 673-7534 251-8165

MOUSER ref: 538-10-89-7202

DIGIKEY ref: WM26820-ND



## RS232 triggering

Make a cable using the 3 pins : TX, RX and G (GND)

Set the RS232 parameters to : 9600bds 8 bits, no Parity, 2 Stop bits  
(x = scene number)

- To play a scene, send 3 bytes : **1 x 255**
- To stop a scene, send 3 bytes : **2 x 255**
- To pause a scene, send 3 bytes : **3 x 255**
- To release a pause, send 3 bytes : **4 x 255**
- To reset a scene, send 3 bytes : **5 x 255**

Note: the scene number (x) can be from 1 to 40. For instance, 11 means Page B Scene #3

## PORT triggering

It is possible to start scenes using the input ports (contact closure). To activate a port, a brief contact must be established between the ports (1...8) and the ground (GND). This is a contact closure so there is no need to hold the connection, it acts like a basic switch.

